

REMARKS

This amendment is responsive to the non-final Office Action mailed on February 11, 2005. Claims 17-35 are pending and claims 32-35 have been amended. Although Applicants appreciate the indication that claims 32-35 contain allowable subject matter, Applicants have elected to not rewrite these claims in independent form as suggested by the Examiner. In view of the following remarks, Applicants respectfully submit that this application is in complete condition for allowance and request reconsideration of the application in this regard.

Rejection of Claims Under 35 U.S.C. § 103

Claims 17-31 stand rejected under 35 U.S.C. § 103(a) as unpatentable over *Cran* (U.S. Patent No. 3,502,322) in view of *Capdeboscq* (U.S. Patent No. 4,614,512). Claims 17 and 29 are the only independent claims from among the rejected claims. The Examiner admits that *Cran* fails to teach “applying negative pressure differential to the first portion of the web.” The Examiner contends that it would have been obvious to one of ordinary skill in the art to “apply negative pressure differential to the first portion of the web” in order “to guarantee that the first portion of the web is laid on the active part of the conveyor belts and therefore to guarantee that they are advanced at the cycle of the machine.” Applicants respectfully disagree with the Examiner’s contention for the reasons set forth in the following remarks.

The Examiner does not provide a sufficient motivation to modify the sheet folding device in *Cran* by applying a negative pressure to the first portion of the web as disclosed in *Capdeboscq*. Specifically, *Capdeboscq* does not provide any objective rationale for modifying *Cran* in the manner suggested by the Examiner. *Capdeboscq* discloses a sheet folding device in which suction is applied from suction boxes (19, 20) through holes (4) in endless belts (10, 11).

The suction secures the blank (1) to the endless belts (10, 11). To cause folding along fold lines (2, 3), the device disclosed in *Capdeboscq* is provided with folding elements in the form of spiral bars (7, 8), or another complex mechanical folding aid. Each of the spiral bars (7, 8) guides one side edge of the blank (1) by contact to cause folding as the blank (1) is conveyed by the endless belts (10, 11) past the spiral bars (7, 8).

Cran discloses a guide sheet (labeled with reference numeral 17 in Figs. 2, 10 and 11; labeled with reference numeral 32 in Fig. 8) that is shaped, as described at column 2, lines 68-71, to constrain "the air curtain to blow firstly inwardly and upwardly and then inwardly and downwardly." In addition to the guide sheets (17, 32), the sheet folding device in *Cran* includes rods (labeled with reference numeral 1 in Fig. 1; labeled with reference numeral 15 in Figs. 2, 10 and 11; unlabeled but shown in Fig. 8) each of which, as described at column 1, lines 63-65 and column 2, lines 8-10, restrains the material along a corresponding fold line.

A person of ordinary skill in the art would not modify *Cran* to add the suction boxes (19, 20) and perforated endless belts (10, 11) because the rods (1; 15) in *Cran* mechanically constrain the blank to define the fold lines. Consequently, a person of ordinary skill in the art would not be motivated to further apply a negative pressure differential to a portion of the blank between these rods (1; 15), as the Examiner contends is disclosed in *Capdeboscq*, because the introduction of a negative pressure differential between rods (1; 15) is not necessary to cause folding in *Cran*. It follows that the Examiner is relying on disclosure in *Capdeboscq* to solve a problem that is not present in *Cran*. *Cran* does not require the application of a negative pressure differential "to guarantee that the first portion of the web is laid on the active part of the conveyor belts" because the rods (1; 15) in *Capdeboscq* already guarantee this.

The Examiner is improperly using hindsight analysis based upon Applicants' disclosure as a template for a purported rationale to modify *Cran* according to the disclosure in *Capdeboscq* and, based upon that modification, to incorrectly contend that Applicants' independent claim 17 is *prima facie* obvious. In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. See MPEP Section 2141.02. Because most if not all inventions arise from a combination of old elements, every element of a claimed invention may often be found in the prior art. See In re Rouffet, 149 F.3d 1350, 1357 (Fed. Cir. 1998). However, identification in the prior art of each **individual** part claimed is insufficient to defeat patentability of the **whole** claimed invention. See id. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. See In re Dance, 160 F.3d 1339, 1343 (Fed. Cir. 1998); In re Gordon, 733 F.2d 900, 902 (Fed. Cir. 1984). According to MPEP § 2143.01, "a statement that modifications of the prior art to meet the claimed invention would have been well within the ordinary skill of the art at the time the claimed invention was made because the references relied upon teach that all aspects of the claimed invention were **individually** known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references."

Ex parte Levengood, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993).

The Examiner has found a disclosure in *Capdeboscq* of applying a negative pressure differential to a first portion of a web, but has improperly combined that disclosure with *Cran* without considering independent claim 17 as a whole. As explained in the preceding

remarks, the Examiner has not presented an objective rationale sufficient to induce a person of ordinary skill in the art to combine these references in the suggested manner. Consequently, for at least this reason, the Examiner has failed to properly support a case of *prima facie* obviousness.

Assuming *arguendo* that *Cran* and *Capdeboscq* could be combined as suggested by the Examiner, Applicants submit that their combined disclosure does not disclose the subject matter of Applicants' independent claim 17. Specifically, the combination of *Cran* and *Capdeboscq* fails to disclose folding a moving nonwoven web. Instead, *Cran* and *Capdeboscq* each disclose folding a blank that has leading and trailing edges present near the folding device during folding. This contrasts with Applicants' independent claim 17 in that the recited moving nonwoven web is significantly longer than these blanks and has leading and trailing edges that are not normally within the vicinity of the folding device during folding. Consequently, for at least this additional reason, the Examiner has failed to properly support that independent claim 17 is *prima facie* obvious. Hence, Applicants submit that independent claim 17 is patentable.

Because claims 18-28 depend from independent claim 17, Applicants submit that these claims are also patentable for at least the same reasons discussed above. Furthermore, each of these claims recites a unique combination of elements not taught, disclosed or suggested by the combination of *Cran* with *Capdeboscq*.

As an example and with specific regard to dependent claims 18-20¹, the Examiner contends that "the modified method of *Cran* meets all of the claimed limitations, except for applying second and third negative pressure differential." The Examiner also contends that it

¹ Because the Examiner did not discuss the rejection of claims 18-20 with specificity, Applicants must presume that the remarks offered by the Examiner in the sole full paragraph on page 2 of the "Detailed Action" pertain to claims 18-20 because the Examiner refers to "applying second and third negative pressure differential."

would have been obvious to "separate the suction box into separate three suction boxes to make the suction more efficient and economical, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179." Applicants disagree with the Examiner's contentions.

Certainly, as Nerwin states, "the mere fact that a given structure is integral does not preclude its consisting of various elements." However, the modifications to *Capdeboscq* that the Examiner is proposing in this case are not merely separating the structure capable of applying the first negative pressure differential into a plurality of elements in which the additional elements are capable of applying another negative air pressure either upstream or downstream of the first negative pressure differential. Instead, the Examiner is adding structure operable independently from the structure providing the first negative pressure differential. Such a reconstruction of the apparatus in *Capdeboscq* would not constitute simply an obvious change in its constituent number of elements, but instead would involve modifying its elements and including other elements so that it could perform one of its functions in a different way. The Examiner is attempting to circumvent the requirement to show desirability by relying on Nerwin as a *per se* rule of obviousness. Such "reliance on *per se* rules of obviousness is legally incorrect and ... is simply inconsistent with section 103" In re Ochiai, 71 F.3d 1565, 1570 (Fed. Cir. 1995).

Consequently, for at least this additional reason, the Examiner has failed to properly establish that dependent claims 18-20 are *prima facie* obvious.

As another example and with specific regard to dependent claims 21-25, the Examiner contends that these claims would have been "an obvious matter of design choice to a person of ordinary skill in the art to provide different directions of impinging airflow because

Applicant has not disclosed that by impinging airflow in different directions provides an advantage, is used for a particular purpose, or solves a stated problem." Applicants disagree with the Examiner's contention. In direct conflict with the Examiner's contention are Applicants' statements made in the specification at page 15, lines 17-25, which preclude the Examiner from dismissing claims 21-25 simply as a matter of "design choice." Consequently, for at least this additional reason, the Examiner has failed to properly support that dependent claims 21-25 are *prima facie* obvious.

As another example and with specific regard to dependent claims 26 and 27, the Examiner contends that "Cran discloses a continuous member (1, fig. 1) in a space defined between the second portion and the first portion (see figs. 5-7) and the continuous member defines the longitudinal fold line...". Claim 26 recites "extending a continuous elastic member in the machine direction adjacent to the nonwoven web; and securing the continuous elastic member in a space defined between the second portion and the first portion after folding." The continuous member (1) identified by the Examiner is not a "continuous elastic member" as set forth in Applicants' claim 26. Instead, the continuous member (1) has arms of a length visible in Figs. 1, 5-7 of *Cran* and, furthermore, is not described by *Cran* as being elastic. Moreover, the continuous member (1) identified by the Examiner in *Cran* is not "secured" between the first and second portions after folding, as set forth in Applicants' claim 26. Instead, the continuous member (1) in *Cran* is only present between the first and second portions during folding. After folding, the continuous member (1) in *Cran* is absent from a position between the first and second portions because of the downstream transport of the blank and, in particular, the continuous member (1) is not positioned between the first and second portions when the presser roller (10) is used to crease the folds. Consequently, for at least this additional reason, the

Examiner has failed to properly support that dependent claims 26 and 27 are *prima facie* obvious.

Independent claim 29 sets forth “applying a first negative pressure differential to the first portion and the second portion of the nonwoven web”, “applying a second negative pressure differential to the first portion of the nonwoven web downstream in the machine direction from the first negative pressure differential,” and “aspirating air through the second portion effective to fold the second portion toward the first portion about a fold line extending in the machine direction.” Applicants note that the Examiner does not address the differences between the combination of *Cran* with *Capdeboscq* and the subject matter set forth in independent claim 29. Consequently, the Examiner has not met the threshold standard of patentability to be applied in obviousness rejections. *See* MPEP Section 2141. Notwithstanding this deficiency of the Office Action, Applicants traverse the rejection of independent claim 29 for at least the reasons set forth below.

Applicants submit that the rejection over the combination of *Cran* with *Capdeboscq* is improper because claim 29 does not set forth the application of a positive pressure differential as the Examiner contends is disclosed in *Cran*. Furthermore, Applicants believe that the combination of *Cran* with *Capdeboscq* does not disclose or suggest the claimed invention. For example, the Examiner contends that it would have been obvious to separate one or both of the suction boxes (19, 20) in *Capdeboscq* into separate suction boxes. Applicants have explained above why the Examiner’s attempted modification to *Capdeboscq* based upon Nerwin is improper.

However, even if this were a permitted modification to *Capdeboscq*, which Applicants believe it is not, the modified suction box (19 or 20) still would not apply a first

negative pressure differential to the first and second portions of the nonwoven web and a second negative pressure differential to only the first portion of the nonwoven web downstream in the machine direction from the first negative pressure differential, as set forth in Applicants' independent claim 29. According to Applicants' claim 29, the second portion is folded toward the first portion about a fold line extending in the machine direction but only after a first negative pressure is applied to the second portion. *Capdeboscq* does not disclose or suggest applying a negative pressure to the second portion of the blank that experiences folding. For this reason alone, Applicants' claim 29 is patentable.

In addition, the modification to the suction box in *Capdeboscq* suggested by the Examiner in connection with claims 18-20, ever if this modification based upon Nerwin were proper, would supply suction to holes (4) in one of the endless belt (10, 11). Each of the endless belts (10, 11) moves in a linear path. Consequently, suction would only be applied to a first portion of the blank moving on one of the endless belts (10, 11) along the entire length of the corresponding suction box (19 or 20) even if the suction box were divided into multiple suction boxes along the belt length. Suction from the modified suction box would not be applied to the second portion of the blank, which is the portion being folded over the first portion, at any position along the linear length of the corresponding endless belt. For at least these additional reasons, the Examiner has failed to properly support a case of *prima facie* obviousness.

Because claims 30 and 31 depend from independent claim 29, Applicants submit that these claims are also patentable for at least the same reasons discussed above. Furthermore, each of these claims recites a unique combination of elements not taught, disclosed or suggested by the combination of *Cran* with *Capdeboscq*. Moreover, dependent claims 30 and 31 are

patentable for at least the same additional reasons as dependent claims 26 and 27, as explained in Applicants' preceding remarks.

CONCLUSION

Applicants have made a bona fide effort to respond to each and every requirement set forth in the Office Action. In view of the foregoing amendments and remarks, this application is submitted to be in complete condition for allowance and, accordingly, a timely notice of allowance to this effect is earnestly solicited. In the event that any issues remain outstanding, the Examiner is invited to contact the undersigned to expedite issuance of this application.

Applicants do not believe fees are dues in connection with filing this communication. If, however, any fees are necessary as a result of this communication, the Commissioner is hereby authorized to charge any under-payment or fees associated with this communication or credit any over-payment to Deposit Account No. 23-3000.

Respectfully submitted,

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Attachments